CITY OF MILPITAS

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2013 CALGreen Residential Mandatory Measures Checklist

This checklist applies to newly constructed buildings, additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall only apply to and/or within the specific area of the addition or alteration.

Measures in this checklist apply to either low-rise residential buildings, high-rise residential buildings, or both, unless noted with the following banner:

[LR] = Measures applicable to low-rise buildings only

[HR] = Measures applicable to high-rise buildings only

***Note: On and after 1/1/2014, residential buildings undergoing permitted alterations, additions or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department.

| Feature or Measure | Required |
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| PLANNING AND DESIGN | |
| Site Development (4.106) | |
| Storm water drainage management shall be implemented during construction for projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more. | |
| Surface water shall be managed to drain away from buildings. | |
| Electric vehicle (EV) charging for new construction. New construction shall comply with sec. 4.106.4.1 and 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with California Electrical Code (CEC), Article 625. | |
| WATER EFFICIENCY AND CONSERVATION | |
| Indoor Water Use (4.303) | |
| Water closets. The effective flush volume of all water closets shall not exceed 1.28 gpf. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets. | |
| Urinals. The effective flush volume of urinals shall not exceed 0.5 gpf. | |
| Single showerheads. Showerheads shall have a max. flow rate of not more than 2.0 gpm at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads. | |
| Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 2.0 gpm at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time. | |
| Residential lavatory faucets. The max. flow rate of residential lavatory faucets shall not exceed 1.5 gpm at 60 psi. The min. flow rate of residential lavatory faucets shall not be less than 0.8 gpm at 20 psi. | |
| Lavatory faucets in common and public use areas. The max. flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gpm at 60 psi. | |
| Metering faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.25 gallons per cycle. | |
| Kitchen faucets. The max. flow rate of kitchen faucets shall not exceed 1.8 gpm at 60 psi. | |
| Outdoor Water Use (4.304) | |
| Automatic irrigation systems controllers installed at the time of final inspection shall be | |

2013 CALGreen Residential Mandatory Measures Checklist (Cont'd)

| Feature or Measure | Required |
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| weather-based or soil moisture-based that automatically adjust irrigation in response to changes | |
| in plants' needs as weather conditions change; or weather-based controllers without integral | |
| rain sensors shall have a separate wired or wireless rain sensor which connects with the | |
| controllers. | |
| MATERIAL CONSERVATION AND RESOURCE | |
| Enhanced Durability and reduced Maintenance (4.406) | |
| Rodent proofing. Annular spaces around pipes, electric cables, conduits, or other openings in | |
| dole/bottom plates at exterior walls shall be protected against the passage of rodents by closing | |
| such openings with cement mortar, concrete masonry or similar method acceptable to the | |
| enforcing agency. | |
| Construction Waste Reduction, Disposal and Recycling (4.408) | |
| A minimum of 50% of the non-hazardous construction waste generated at the site shall be | |
| diverted to recycle or salvaged. This is achieved by submitting a Waste Management Plan for | |
| approval by the Building and Safety Department prior to demolition permit issuance and | |
| providing documentation to demonstrate compliance with the Waste Management Plan after | |
| completion of demolition and/or prior to final inspection. Puilding Maintenance and Operation (4.410) | |
| Building Maintenance and Operation (4.410) | |
| An operation and maintenance manual shall be available in the building at the time of final | |
| inspection. | |
| ENVIRONMENTAL QUALITY | |
| Fireplaces (4.503) | |
| Gas fireplace shall be a direct-vent sealed-combustion type. | |
| Woodstove or pellet stove shall comply with U.S. EPA Phase II emission limits. | |
| Pollutant Control (4.504) | |
| At the time of rough installation, during storage on the construction site and until final startup | |
| of the heating, cooling and ventilation equipment, all duct and other related air distribution | |
| component openings shall be covered. | |
| Adhesives, sealants and caulks shall be compliant with VOC limits as shown in Table 4.504.1 | |
| or 4.504.2 as applicable. | |
| Aerosol adhesives and smaller unit sizes of adhesives and sealant or caulking compounds shall | |
| comply with statewide VOC standards and other requirements. Paints, stains and other coatings shall be compliant with VOC limits as shown in Table 4.504.3. | |
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| Aerosol paints and coatings shall meet the Product-Weighted MIR limits for ROC and comply with the percent VOC by weight of product limits of Regulation 8, Rule 49. | |
| 1 0 1 | |
| All carpet shall meet the testing and project requirements per sec. 4.504.3. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute's | |
| Green Label program. All carpet adhesive shall meet the requirements of Table 4.504.1. | |
| At least 80% of floor area receiving resilient flooring shall comply with the requirements per | |
| sec. 4.504.4. | |
| Hardwood plywood, particleboard and medium density fiberboard (MDF) used on interior or | |
| exterior of the building shall comply with formaldehyde emission limits per Table 4.504.5. | |
| Documentation shall be provided to the City building inspector verifying that compliant | |
| materials have been used. | |
| Interior Moisture Control (4.505) | |
| Capillary break shall be installed at slab on grade foundations when a vapor retarder is | |
| required. | |
| Moisture content of building materials used in wall and floor framing shall not to exceed 19% | |
| before enclosure. | |

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| Feature or Measure | Required |
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| Insulation products which are visibly wet or have a high moisture content shall be replaced or | |
| allowed to dry prior to enclosure. | |
| Indoor Air Quality and Exhaust (4.506) | |
| Bathroom exhaust fans shall be ENERGY STAR ducted to outside. | |
| Unless functioning as a component of a whole house ventilation system, bathroom exhaust fans | |
| must be controlled by a humidistat between a relative humidity range of 50% - 80%. | |
| Environmental Comfort (4.507) | |
| Duct systems are sized, designed, and equipment is selected using the following methods: | |
| 1.Establish heat loss and heat gain values according to ANSI/ACCA Manual J-2004 | |
| (Residential Load Calculation), ASHRAE handbooks or other equivalent design methods. | |
| 2. Size duct systems according to ANSI/ACCA 1 Manual D-2009 (Residential Equipment | |
| Selection) or other equivalent design methods. | |
| 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2004 or other | |
| equivalent design methods. | |
| INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS | |
| Qualifications (702) | |
| HVAC system installers are trained and certified in the proper installation of HVAC systems. | |
| Special inspectors employed by the owner or owner's agent shall demonstrate competence for | |
| the particular type of inspection to be performed and shall have a certification or education in | |
| the area closely related to the primary job function that is acceptable to the enforcing agency. | |
| Verifications (703) | |
| Verification of compliance with this code may include construction documents, plans | |
| specifications builder or installer certification, inspection reports, or other methods acceptable | |
| to the enforcing agency, which show substantial conformance. | |